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Wassim Haddad

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HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

DUNN, DARRIN D

ART UNIT

PAPER NUMBER

2121

NOTIFICATION DATE

DELIVERY MODE

08/22/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM
mkraft@hp.com
ipa.mail@hp.com

Office Action Summary	Application No. 10/697,961	Applicant(s) HADDAD, WASSIM	
	Examiner DARRIN DUNN	Art Unit 2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 10,13,27 and 28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9,12,14-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is responsive to the communication filed 05/28/2008.
2. Claims 1-9, 11-12, and 14-26 are pending in the application.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-9, 11-12, and 14-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Dutta et al. (USPN 2004/0122976).

5. As per claim 1, Dutta et al. teaches a method of establishing a network connection from a mobile computing device to a data source on a foreign network, the method comprising:

configuring a first network connection between a mobile computing device and a foreign network via a home network ([ABSTRACT], [FIG 5] Mobile IP /SIP management of mobile host between domains mapping. Applicant's instant specification, page 3 lines 16-18, teaches that a network connection may be an '*association with the network.*' One association is that of a CoA (preferably used for non-real time applications). Another association is that of an URL via SIP (preferably used for real-time applications). The implementation of one over another, as in the case of implementing real time communication, is therefore a change in association and would necessitate a breaking of the connection via SIP. SIP is an application layer protocol for

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establishing and tearing down multimedia sessions) ;

determining that a data source ([0014], [0051 - *subnet address*. Applicant's instant specification, page 12 line 5, refers to a data source in the context of a network address) for data requested by the mobile computing device originates from within the foreign network. In effect, determining the location of the mobile device);

breaking at least a portion of the first network connection ([0014], [0077], [FIG 4A-416] e.g., a network connection is associated with the URL provided via SIP for real time communication opposed to using CoA for non-real time communication. In the event real time communication is employed opposed to non-real time communication, SIP is implemented that subsequently provides for establishing and tearing down connections); and then

establishing a second network connection between the mobile computing device and the data source within the foreign network ([FIG 4A – 430], [FIG 4C – 418-436], [0013], [0074], [0076], [0077] SIP implementation for real time communication is understood as providing a connection for real time communication to support inter/intra domain mobility), wherein the second network connection does not use a care of address assigned by the foreign network ([0076 – real time communications invokes an SIP agent. The SIP communication utilizing an IP address opposed to using a care-of-address because latencies associated with the CoA are not suitable for real time applications)

6. (Previously Presented) A method according to claim 1, which uses Session Initiation Protocol (SIP) to initiate the breaking of the first network connection ([0074], [0076])

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7. (Previously Presented) A method according to claim 1, in which at least one of the home network and the foreign network comprises a plurality of sub connections and the method is applied to at least one of the sub connections ([FIG 5])
8. (Previously Presented) A method according to claim 1, in which the portion of the first network connection with the home network that is broken is re-established once data is no longer being requested from the data source by the mobile computing device ([0028] e.g., CoA established for non-real time communication upon cessation of real time communication)
9. (Previously Presented) A method according to claim 1 in which MobileIP is used to maintain a network connection with the foreign network ([0007], [0015] e.g., CoA)
10. (Previously Presented) A method according to claim 1 in which the mobile computing device is assigned an IP address within the foreign network for transmission of data that originates from the foreign network ([FIG 4A-416])
11. (Previously Presented) A method according to claim 6 in which MobileIP is used to maintain a network connection with the foreign network and the IP address assigned to the mobile computing device is used instead of a care of address assigned by the MobileIP for data that originates within the foreign network ([FIG 4C – 418-426 | 418-436], [0008], [0015 lines 12-15]) real time communication using SIP)
12. (Currently Amended) A computing device – ([0028]- mobile node implementing MMP) within a foreign network ([FIG 10]) configured to determine that a network address of a data source, from which a mobile computing device operating in the foreign network, is requesting data, is in the same foreign network ([FIG 5], [0051] subnet determination), the computing device further configured to assign an IP address to the mobile computing device to use whilst

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performing one of requesting and receiving data originating from within the foreign network ([0076 – SIP-MH (e.g., uses IP address, not care-of-address) for real time communication in foreign network), the computing device further configured to then establish a network connection between the mobile computing device and the data source without using a care of address assigned by the foreign network ([0028], [FIG 4C] MMP daemon provides SIP implementation for real time communication. Thus, SIP is preferred over CoA for real time communication])

13. (Previously Presented) The computing device, according to claim 10, further configured to stop using the assigned IP address once data no longer originates from within the foreign network ([0031] as in the case of a home network, a CoA is not implemented)

14. (Currently Amended) A processing device – ([0028] MMP daemon providing Mobile IP and SIP) configured to control the establishment and dropping of network connections within a first network),

the processing device configured to allow a computing device to make a new network connection within the first network while maintaining a first network connection to another network ([0028]- MMP providing Mobile IP and SIP enable connectivity to home network during mobile presence in foreign network suitable for both real and non-real time applications),

the processing device being arranged to provide the computing device with a care of address (MMP daemon- Mobile IP enabled),

the computing device comprising a data transfer controller ([0028 - MMP daemon) configured to determine that data, transmitted to the computing device, originates from within the first network ([0014 -MMP detection of inter-domain movement)

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the computing device configured to assign a network address, comprising an IP address, once it has been determined that the care-of-address should not be used ([0076 – for real time communications, i.e., determining that a care-of-address should not be used, uses SIP which utilizes the IP address over car-of-address. It is understood that real time communications do not use care-of-address for communication) and

wherein the processor device is configured to that the transmitted transmit data to the computing device without using the care of address ([0077-0078] e.g., MMP-SIP -real time communication)

15. (Original) A memory storing instructions which when read on to at least one processing device cause that processing device to perform the method of claim 1 ([0028], [FIG 7] device with MMP daemon)

16. (Previously Presented) A memory storing instructions which when read on to a processing device cause that processing device to function as the computing device of claim 9 ([FIG 7] MMP daemon)

17. (Previously Presented) A memory storing instructions which when read on to a processing device cause that processing device to function as the processing device of claim 12 ([FIG 7] device with MMP daemon)

18. (Original) A memory storing instructions which when read on to a processing device running a network cause the network to function as the network of claim 15 ([FIG 7] device with MMP daemon)

19. (Previously Presented) A method of establishing network connectivity between a mobile computing device operating within a foreign network and a data source within the foreign

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network, the method comprising:

providing the mobile computing device with a care of address and establishing a first network connection to the data source using the care of address ([0028] MMP-Mobile IP, [FIG 5]);

determining that data requested by the mobile computing device originates from within the foreign network ([0014], [0031] subnet detection);

breaking at least a portion of the first network connection that uses the care of address ([0014], [0077], [FIG 4A-416] *supra claim 1* discussion); and

assigning a network address, other than the care of address, to the mobile computing device such that data, originating from the foreign network, is sent to the mobile computing device using the network address rather than the care of address for that portion of the first network connection that was broken ([0028], [0077-78] SIP -URL mapping)

20. (Currently Amended) A device configured to establish a network connection and communicate with a home network, the device configured to determine the origin of data transmissions and further configured to receive a care of address by a foreign network ([0028] MMP daemon - Mobile IP/SIP), the care of address being used to enable data transmission between the device and the home network, the device being arranged to then communicate with the foreign network without using the care of address if it is determined that data being sent to the device originates within the foreign network ([0008], [0077-78] MMP-SIP)

21. (Currently Amended) A server operating on a first network, the server configured to sequentially:

provide a care of address to at least one computing arrangement on the first network ([0028] MMP-Mobile IP); connect the computer arrangement to another network using the care of

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address ([FIG 5])

determine that data being transmitted to the computer arrangement originates from a data source within the first network ([0014], [0031] subnet detection); and

connect the computing arrangement to the data source without using the care of address ([0028], [0077-78] MMP-SIP).

22. (Previously Presented) A second computer network ([FIG 5 – third domain]) comprising a computing arrangement configured to establish a second network connection whilst maintaining a first network connection to a first network ([FIG 5], [0028] MMP-Mobile IP/SIP), the first network connection using a care of address assigned to the computer arrangement ([FIG 5] Mobile enabled phone), the second network comprising a data transfer controller configured to determine that data, transmitted to the computing arrangement originates from within the second network ([0014] MMP subnet detection), the data transfer controller further configured to determine whether the data should be transmitted without the use of the care of address ([0077-78] real time communication vs non-real time communication requires SIP over CoA)

23. (Currently Amended) A method of establishing a network connection allowing a computing device operating on a foreign network to receive data from a data source within the foreign network, without the use of a care of address associated with the computing device, the method comprising sequentially:

establishing a first network connection between the computing device and a home network using a care of address assigned to the computing device ([FIG 5], [0028] MMP-Mobile IP); determining that data requested by the computing device originates from a data source within the foreign network ([0014], [0031], [FIG 5]); and

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disconnecting at least a portion of the first network connection ([FIG 4C-418-436] SIP association); and establishing a second network connection between the data source within the foreign network and the computing device operating in the foreign network for that portion of the first network connection that was disconnected by assigning an IP address to the computing device for transmission of data that originates from the foreign network ([0077-78], [0029]).

Claim Rejections - 35 USC § 103

28. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

29. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

30. Claims 8,14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dutta et al. (USPN 2004/0122976) in view over Flynn (USPN 6549522)

31. As per claim 8, Dutta et al. does not teach determining bandwidth availability on the foreign network prior to establishing the second network connection. Flynn teaches that it is desirable to check the available bandwidth before allocating a datagram ([COL 7 lines 30-35])

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Therefore, at the time the invention was made, one of ordinary skill in the art would have motivation to determine the available bandwidth of a foreign agent prior to sending datagrams. Insufficient bandwidth is likely to compromise the integrity of a connection and therefore would have been obvious to verify the available bandwidth means to improve system integrity.

32. As per claim 14, Dutta et al. does not teach determining bandwidth availability before determining that the care of address should not be used. Flynn teaches that it is desirable to check the available bandwidth before allocating a datagram ([COL 7 lines 30-35])

Therefore, at the time the invention was made, one of ordinary skill in the art would have motivation to assess the available bandwidth. Since the determination of not using a CoA is interpreted as creating a connection via SIP for real time communication, it would have obvious to have ensured enough available bandwidth existed prior to establishing real time communication, i.e., without using a CoA.

33. As per claim 15, Dutta et al. teaches establish a first network connection between a computing device in a foreign network and a data source in the foreign network, using a care of address ([0028] Mobile IP using CoA)

establish a second network connection for the computing device in the foreign network without using the care of address after the determining ([0028], [0077-78] SIP implemented for real time communication, i.e., creating another association or second connection); and then break the first network connection that uses the care of address ([FIG 4A-C] SIP implemented for real time over CoA). However, Dutta et al. does not teach determine at least one of: bandwidth requirements from the computing device to the data source that does not use the care

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of address. Flynn teaches that it is desirable to check the available bandwidth before allocating a datagram ([COL 7 lines 30-35])

Therefore, at the time the invention was made, one of ordinary skill in the art would have motivation to assess the available bandwidth. Since the determination of not using a CoA is interpreted as creating a connection via SIP for real time communication, it would have obvious to have ensured enough available bandwidth existed prior to establishing real time communication, i.e., without using a CoA.

Response to Amendment

34. Applicant's amendments, submitted 05/28/2008, have been entered. The U.S.C 101 rejection of claims 16-19 has been withdrawn.

Response to Arguments

35. Applicant's arguments filed 05/28/2008 have been fully considered but they are not persuasive.

Argument A:

The PTO is only entitled to rely on the filing date of the provisional application 'only by proving the provisional application complies with the 35 USC 102(a) requirement that the invention was known or used in the country' before the Appellant's filing date.

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Dutta claims the benefit of U.S. Provisional Application No. 60/421,031 filed on 10/24/2002, entitled 'Integrated Mobility Management.' ([0001]). 35 U.S.C provides that an 'application for patent filed under section 111(a)...by an inventor or inventors named in the provisional application, shall have the same effect, as to such invention, as though filed on the date of the provisional application...'

Examiner respectfully disagrees. The claim to provisional priority satisfies the language of 35 U.S.C 119(e).

Argument B:

Applicant submits that *Dutta* does not disclose breaking a first connection and establishing a second connection not using a care-of-address assigned by the foreign network.

First network connection

Dutta teaches an integrated mobility management system enabling both real time and non-real time communications for mobile device applications. A first connection is established when the mobile device enters a foreign network, in effect utilizing the principles of Mobile IP such that a care-of-address is implemented for communication with the network. In effect, this would establish a first network connection.

Second network connection

Dutta specifically teaches that SIP is required for real time communications. SIP is an application layer protocol used for establishing and tearing down multimedia sessions. *Dutta*

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provides that both real time and non-real communication applications may be implemented. In effect, a mobile phone that initially moves from a home to a foreign network will be assigned a care-of-address via the foreign network (e.g., Mobile IP). In light of applicant's specification, page 12 lines 26-32, real time communication (e.g., video) may be required after moving into the foreign network. Dutta, in effect, provides such a capability via using SIP. When real time communication is required, a real time connection is then capable of being realized even though the mobile phone is within the foreign network. SIP established a new connection for real time communication.

Clarification of 'breaking,' data source,' and 'network connection' would be helpful in distinguishing over the prior art.

Examiner invites applicant to discuss the claim limitations, in light of *Dutta*, for the purpose of clarifying any ambiguity in examiner's interpretation and application of the art.

Conclusion

36. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DARRIN DUNN whose telephone number is (571)270-1645. The examiner can normally be reached on EST:M-R(8:00-5:00) 9/5/4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert DeCady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DD
08/16/2008

/Albert DeCady/
Supervisory Patent Examiner
Art Unit 2121